REGULATION 7.17 Standard of Performance for New Automobile and Light Duty Truck Surface Coating Operations

SECTION 1 Applicability

The provisions of this regulation shall apply to each affected facility commenced on or after the effective date of the regulation.

SECTION 2 Definitions

Terms used in this regulation not defined herein shall have the meaning given them in Regulation 1.02.

- (a) "Affected facility" means a coating line for automobile and light duty truck frames, small parts, wheels, and main body parts at an assembly plant, except any exemptions in section 6 (d) of this regulation.
- (b) "Applicator" means the mechanism or device used to apply the coating, including, but not limited to dipping and spraying.
- (c) "Automobile" means all passenger cars or passenger car derivatives capable of seating 12 or fewer passengers.
- (d) "Coating line" means one or more apparatus and/or operations comprised of all applicators, flash-off areas, and ovens wherein a surface coating containing volatile organic compounds is applied, dried, or cured. This shall include, but is not limited to:
- (i) mixing operations;
- (ii) process storage;
- (iii) applicators;
- (iv) drying operations including but not limited to flash off area evaporation, oven drying, baking, curing, and polymerization;
- (v) clean up operations;
- (vi) leaks, spills and disposal of volatile organic compounds;
- (vii) processing and handling of recovered volatile organic compounds.
- (viii) For the purposes of determining compliance with this regulation, if any equipment or

operation could be considered to be a part of more than one coating line, its volatile organic compound emissions shall be assigned to each coating line of which it is a part proportionally to the throughput of volatile organic compound it receives from or distributes to each coating line.

- (ix) If any portion of the series of equipment and/or operations qualify for an exemption according to section 5, then that portion shall be considered to be a separate coating line.
- (e) "Final repair coating line" means the repainting of any coatings which are damaged during vehicle assembly.
- (f) "Flashoff area" means the space between the application area and the oven.
- (g) "Light-duty truck" means any motor vehicle rated at 3864 kilograms (8500 pounds) gross vehicle weight or less which are designated primarily for purposes of transportation of property or are derivatives of such vehicles. (Including, but not limited to, pickups, vans, and window vans.)
- (h) "Prime coat coating line" means a coating line which is responsible for protecting the surface from corrosion and providing for good adhesion of the topcoat.
- (i) "Process storage" means mixing tanks, holding tanks, and other tanks, drums, or other containers which contain surface coatings, volatile organic compounds or recovered volatile organic compounds, but does not mean storage tanks which are subject to Regulation 7.12.
- (j) "Topcoat coating line" means a coating line for the coating of the surface to obtain desired aesthetic effects.
- (k) "Volatile organic compounds" means chemical compounds of carbon (excluding methane, ethane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, and ammonium carbonate) which have a vapor pressure greater than 0.1 mm Hg at conditions of 20 degrees Celsius and 760 mm of Hg.
- (1) "Surfacer" means the spray application of prime to touch-up areas on the surface not adequately covered during electrodeposition.
- (m) "Volatile organic compounds net input" means the total amount of volatile organic compounds input to the affected facility minus the amount of volatile organic compounds that are not emitted into the atmosphere. Volatile organic compounds that are prevented from being emitted to the atmosphere by the use of control devices shall not be subtracted from the total for the purposes of determining volatile organic compound net input. When the nature of any operation or design of equipment is such as to permit more than one interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply.

(n) "Electrophoretic deposition" means a process of applying a coating by dipping the component in a coating bath with an electrical potential difference between the component and the bath.

SECTION 3 Standard for Volatile Organic Compounds

No person shall cause, allow or permit an affected facility to discharge into the atmosphere more than 15 percent by weight of the volatile organic compounds input into the affected facility.

SECTION 4 Compliance

- (a) In all cases the design for any control device is subject to approval by the District.
- (b) Compliance with the standard in section 3 shall be demonstrated by a material balance except in those cases which the District determines that a material balance is not possible. For those cases where a material balance is not possible, compliance will be determined based upon an engineering analysis by the District of the system. If requested by the District, performance tests as specified by the District shall be conducted in order to determine the efficiency of the control system or any part of the system.
- (c) With the prior approval of the District, the owner or operator may elect to effect such changes in the affected facility as are necessary to qualify for an exemption under section 5.
- (d) Whenever deemed necessary by the District, the District shall obtain samples of the coatings used at an affected facility to verify that the coatings meet the requirements in section 5 of this regulation. The following methods of analysis for coatings shall be used as applicable except in those cases where the District determines that other methods would be more appropriate.
- (i) ASTM D 1644-75 Method A;
- (ii) ASTM D 1475-60 (74);
- (iii) ASTM D 2369-73; or
- (iv) Federal Standard 141a, Method 4082.1.

SECTION 5 Exemptions

- (a) Any affected facility shall be exempt from the provisions of section 3 of this regulation if the volatile organic compound content of the coating as delivered to the applicator(s) is:
- (i) Prime coating line: 1.2 pounds per gallon of coating, excluding water, which shall be applied by electrophoretic deposition.

- (ii) Surfacers: 2.8 pounds per gallon of coating, excluding water, or 55 percent solids by volume, as applied, for volatile organic compounds reduced coating spray applied with a minimum 65% transfer efficiency.
- (iii) Topcoat coating line: 2.8 pounds per gallon of coating as applied excluding water, or 50% solids by volume for volatile organic compounds reduced coating applied with a minimum of 65% transfer efficiency.
- (iv) Repair coating line: 4.8 pounds per gallon of coating as applied, excluding water, applied with a minimum of 65% transfer efficiency.
- (b) Any affected facility using this section of this regulation may elect to use an arithmetic average of the coatings used in the particular coating line involved. If such average meets the exemption then all the coatings will be considered to meet the exemption.
- (c) The exemption specified in this section may be achieved by:
- (i) use of a low solvent coating, and/or
- (ii) any other emission reduction process or equipment shown to be as effective.
- (d) Certain coatings operations which are exempted from this regulation are:
- (i) underbottom sound deadener coatings
- (ii) zinc rich anti-rust and weld line anti-rust prime coatings
- (iii) adhesive coatings or mastics
- (iv) flexible coatings
- (v) plastic body fillers or caulks
- (vi) interior coatings which are applied after upholstery and interior plastic parts are attached to the body.

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